Conclusions. There is no statistical correlation between the waiting time until surgery >5 weeks and a better pathological response. It would be necessary to design specific studies to prove the stated hypothesis. The local survival data is related to the sample characteristics (older patients, comorbidities).

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Stereotactic body radiation therapy (SBRT) liver our experience in Group Croasa

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Introduction. We describe our series of patients treated with SBRT liver since 2010. Target Analyze dosimetric aspects, treatment response and acute toxicity.
Materials and methods. CT-simulation c/c IV (slice thickness) with body stereotactic body frame (ELEKTA) with mattress individualized and diaphragmatic compression. Post-immobilization fluoroscopy to determine the three-dimensional displacement and decide PTV margins. Use liver-window/level for Identify the lesion. Image Fusion (PET-CT or MRI). SYNERGY multi-energy linear accelerator. Isocenter stereotactic localization (Dynatrac system). Robotic table (6 degrees of freedom-Hexapod). Image-guided RT (IGRT) cone beam. We included 11 treatments in 7 patients (p), (3 of them with several locations: 2 p treated LOES simultaneous 2–3 and 1 p treated twice). Histology: 1 hepatocarcinoma, the rest metastases: adenocarcinomas of colon, pancreas, rectum, small cell lung, bladder urothelial. 6 males. Average age: 64 years (50–72).
Results. Average GTV volume: 18.5 cm^3 (1.1–68.2), average PTV volume: 44 cm^3 (7.2–150) (largest PTV: 72 year old woman treated 6 months ago, hepatic EE (RMI), currently receiving chemotherapy because of lung PE). Radiotherapy techniques: 2 IMRT-SS (beams/segments: 11/54, 12/24), 1 VMAT-SA and 8 RT-3D (11–29 beams). Schemes as characteristics of the case, the most used: 8×7.5 Gy (other: 8×7, 7×8, 5×12 and 6×9). Well tolerated without acute toxicity registration. Mean follow-up: 14 months (3–24). Local progression free interval range: 14 months (3–24). Median overall survival: 33 months (12–43). Status: Only 1 patient died of distant disease, 2 p current ongoing SBRT (other locations).
Conclusions. The SBRT achieves ablation of hepatic lesions and constitute a valid option compared to surgical resection of the same, with a great tolerance. Although optimal schemes fraction dose have not been established, our scheme is consistent with published hypofractionated.

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Tumor regression grade and tumor volume reduction rate by magnetic resonance in neoadyuvant chemoradiation for rectal cancer

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Purpose. To evaluate the tumor volume reduction rate (TVRR) measured by magnetic resonance volumetry and to correlate with the pathologic tumor response after preoperative chemoradiotherapy (CRT) for locally advanced rectal cancer.
Materials and methods. Ten consecutive patients with locally advanced rectal cancer (TNM Stage III–IV) had undergone preoperative CRT and radical surgery. The tumor volume was measured using three-dimensional magnetic resonance volumetry before and after CRT, before surgery. We analyzed the correlation between the TVRR and the pathologic tumor response in terms of tumor regression grade (TGR) proposed by Rye et al.
Results. The mean tumor volume was 42 cm^3 (max 76, min 14) before and 12 cm^3 (max 36 and min 0 cm^3) after CRT. The mean TVRR was 70.31% (max 100%, min, 29%). The TGR was: 5 patients with TGR 0 and 1, and 5 patients with TGR 2 and 3. TVRR after CRT was different between patients with poor TGR (2 and 3) and those with good TGR (0 and 1). The patients with good regression (TGR 0 and 1) had TVRR > 75%, and those with poor regression (TGR 2 and 3) had TVRR < 75%.
Conclusion. The TVRR measured using three-dimensional magnetic resonance volumetry correlated well with the pathologic tumor response in terms of TGR after preoperative CRT for locally advanced rectal cancer. This conclusion is consistent with the results reported in the literature.

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